Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 . (Cancelled)

2. (Cancelled)

3. (Previously presented) An electric stimulator for alpha-wave derivation comprising:

a control section including: a key input unit for supporting user operation; a microprocessor for setting a frequency, a voltage, a cycle and an operation time according to the a key input signal transferred from the key input unit, for controlling an output of the frequency and voltage according to the set, for determining whether the outputted frequency and voltage are applied to an ear of a user, for performing a switching of a wire/wireless mode by determining whether a jack is connected to an electric stimulating unit, for outputting a transmitting signal to wirelessly transmit a setting data after a predetermined time, when the wireless mode is switched, and for outputting a turn-on/off signal corresponding to an alarm signal and the turn-on/off signal indicative of a wire/wireless mode control state; a control-side transmitter/receiver for transmitting the setting data according to the transmitting signal and transmitting/receiving input/output data; an oscillator for oscillating at a frequency of 1 Hz to 50 Hz according to a frequency output control; and a connector connected to the jack and connected to the microprocessor for determining the wire/wireless state according to variations of input current value;

a connecting line connecting the connector with the jack and transferring the frequency and voltage from the jack to the electric stimulating unit; and

the electric stimulating unit including: a contacting terminal connected to the connecting line and adapted to contact an auricle of vagus nerves of the ear; a wire/wireless detecting unit interposed between the connecting line and the contacting terminal for detecting the wire/wireless mode state according to whether it is connected to the jack or not; a remote control unit for determining the wire/wireless mode state, for controlling operation of the electric stimulating unit itself, in case of the wireless mode, and for controlling the frequency and voltage according to the set data transmitted from the control-side transmitter/receiver; a

transmitter/receiver communicating with the control-side transmitter/receiver for transmitting the input/output data to the remote control unit; an oscillator for supplying the frequency to the remote control unit; and a battery for supplying an electric power to the remote control unit.

4. (Original) The electric stimulator for alpha-wave derivation as claimed in claim 3, wherein the oscillator oscillates at 7 Hz to 14 Hz.

5. (Original) The electric stimulator for alpha-wave derivation as claimed in claim 3, further comprising a non-contact detector for detecting whether the electric stimulating unit is non-contacted to the ear by use of charge accumulation flowing through the jack of the control unit to output the result to the microprocessor.

6. (Currently Amended) The electric stimulator for alpha-wave derivation as claimed in claim 5, further comprising, in order to prevent electric short circuit when the contact state based on the signal transmitted from the non-contact detecting unit is determined,

a variable resistor R1 forming a closed circuit together with the contact terminal for performing a voltage drop according to a resultant resistance value;

a voltage comparator COM for comparing a voltage generated by the resultant resistance value with a predetermined reference voltage;

a switch TRI switched according to the comparison results of the voltage comparator COM;

a capacitor C2 discharged by the switch TR1 to transmit a signal notifying whether there is normality or not to the microprocessor; and

an electric power control unit, ~~which it~~the electric power control unit determines as the normality when the capacitor C2 is discharged, and interrupts supply of a direct current,~~.~~ and which [[only]]the voltage drop ~~happens~~only occurs by the variable resistance R1 when the capacitor C2 is not discharged.

7. (Original) The electric stimulator for alpha-wave derivation as claimed in claim 3, wherein the microprocessor further includes an A/D converter and a D/A converter for converting the signal inputted/outputted to/from the electric stimulating unit.

8. (Original) The electric stimulator for alpha-wave derivation as claimed in claim 3, wherein the microprocessor further includes a timer operating according to setting data comprising a cycle and operation time.

9. (Original) The electric stimulator for alpha-wave derivation as claimed in claim 3, wherein the connecting line has a jack at both ends of the connecting line, the jack detached to the connector and electric stimulating unit.

10. (Original) The electric stimulator for alpha-wave derivation as claimed in claim 3, further comprising an alarm for outputting an alerting sound, when an alarm signal is outputted according to the determining result of voltage application to the ear.

11. (Original) The electric stimulator for alpha-wave derivation as claimed in claim 3, further comprising a display for displaying a set value according to a key input signal transmitted from the key input unit, and for outputting or lighting an operation state.

12. (Currently Amended) The electric stimulator for alpha-wave derivation as claimed in claim 3, wherein the electric stimulating unit has a body temperature detecting unit ~~made in a shape like a crater of a gently slant ridgeline~~configured to be easily inserted in an external auditory meatus, so as to detect a signal for determining body temperature using an infrared processing module, and the body temperature detecting unit has a drilled top surface [[H]]to receive an infrared signal.

13. (Currently Amended) The electric stimulator for alpha-wave derivation as claimed in claim 3, wherein the electric stimulating unit has a blood sugar detecting unit ~~made in a shape like a crater of a gently slant ridgeline~~ configured to be easily inserted in an external auditory meatus, so as to detect a signal for determining blood sugar using an infrared processing module, and the body temperature detecting unit has a drilled top surface [[H]]to receive an infrared signal.

14. (Currently Amended)The electric stimulator for alpha-wave derivation as claimed in claim 3, wherein the electric stimulating unit has a body temperature/blood sugar detecting unit ~~made in a shape like a crater of a gently slant ridgeline~~ configured to be easily inserted in an external auditory meatus, so as to detect a signal for determining body temperature and blood sugar using an infrared processing module, and the body temperature detecting unit has a drilled top surface [[H]]to receive an infrared signal.

15. (Currently Amended) The electric stimulator for alpha-wave derivation as claimed in claim 12, wherein the infrared processing module includes a filtering portion and an infrared detecting portion, in which a sensing region is enclosed by a silicon window having a long pass filter, through which only infrared radiation emitted from the external auditory meatus is passed, and which a front of the sensing region is enclosed by a proper infrared bandpass filter having a spectrum characteristic to a radiation line, which is a radiation of a particular wavelength, of a measured analyte.

16. (Currently Amended) The electric stimulator for alpha-wave derivation as claimed in claim 13, wherein the infrared processing module includes a filtering portion and an infrared detecting portion, in which a sensing region is enclosed by a silicon window having a long pass filter, through which only infrared radiation emitted from the external auditory meatus is passed, and which a front of the sensing region is enclosed by a proper infrared bandpass filter having a spectrum characteristic to a radiation line, which is a radiation of a particular wavelength, of a measured analyte.

17. (Currently Amended) The electric stimulator for alpha-wave derivation as claimed in claim 14, wherein the infrared processing module includes a filtering portion and an infrared detecting portion, in which a sensing region is enclosed by a silicon window having a long pass filter, through which only infrared radiation emitted from the external auditory meatus is passed, and which a front of the sensing region is enclosed by a proper infrared bandpass filter having a spectrum characteristic to a radiation line, which is a radiation of a particular wavelength, of a measured analyte.

18-19. (Canceled)